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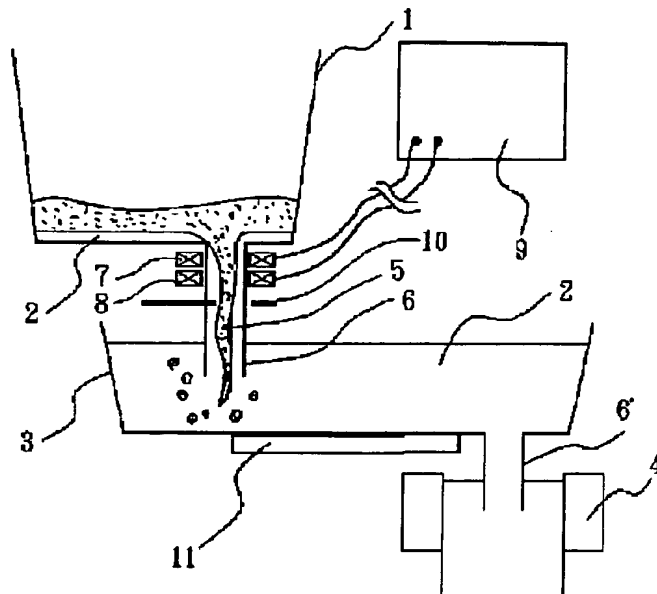
APPLICATION NUMBER : 08068913

APPLICANT : NIPPON STEEL CORP;

INVENTOR : KANEKO KATSUSHI;

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TITLE : DECISION METHOD AND DEVICE FOR  
SLUG OUTFLOW



ABSTRACT : PROBLEM TO BE SOLVED: To precisely decide the slug outflow from a nozzle.

SOLUTION: On the periphery of a nozzle 6, a primary coil 7 which induces magnetic field in the nozzle 6 by applying a.c. current and a secondary coil 8 which detects the magnetic flux of magnetic field induced are assigned. Turn numbers  $N_1$  and  $N_2$  (pieces) of coils 7 and 8 and current  $I$  (A) applied to the primary coil 7 are so set that an expression  $140 \leq I \times N_1 \times N_2 \leq 9000$  is satisfied. Secondary coil voltage is processed with phase detection, and, based on the slug occupation ratio in nozzle, which is decided with secondary coil signal and in-nozzle passage speed of fluid, slug outflow for each charge is decided.

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